ABSTRACT OF THE DISCLOSURE

A matching section performs motion estimation upon a predetermined processing unit of input video (p) by, e.g., an iterative gradient method. A motion vector (v) obtained by the iterative gradient method is obtained by the expression $v = \alpha \cdot \Delta v + v_0$ (wherein v_0 indicates an initial displacement motion vector and Δv indicates a differential vector). A characteristic amount extraction section extracts a characteristic amount from the distribution of motion vectors obtained by the motion estimation. A parameter determination section determines a conversion parameter α applied to the next processing unit by the characteristic amount. If the characteristic amount is equal to or larger than a predetermined threshold, the conversion parameter α is determined to be larger (e.g., $\alpha = 1$). If the characteristic amount is smaller than the threshold, the conversion parameter α is determined to be smaller (e.g., $\alpha = 0.1$).